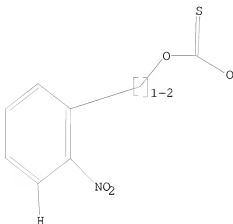```
=>
Uploading C:\Documents and Settings\jlau1\My Documents\10764989 - photolabile
PG\thiocarbonate.str

L1   STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1   STR
```



```
G1 NO2,X,H
G2 G1,CN,MeO,Ak
G3 O,S
```

Structure attributes must be viewed using STN Express query preparation.

```
=> s l1 sss sam
SAMPLE SEARCH INITIATED 15:29:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       4 TO ITERATE

100.0% PROCESSED       4 ITERATIONS                            0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          4 TO      200
PROJECTED ANSWERS:             0 TO        0

L2          0 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 15:29:59 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      46 TO ITERATE

100.0% PROCESSED      46 ITERATIONS                            3 ANSWERS
SEARCH TIME: 00.00.01

L3          3 SEA SSS FUL L1
```
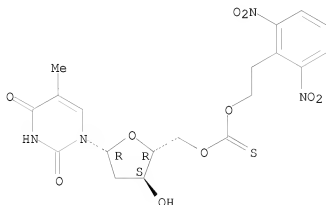
```
=> d l3 scan

L3   3 ANSWERS   REGISTRY   COPYRIGHT 2008 ACS on STN
IN   Thymidine, 5'-[O-[2-(2,6-dinitrophenyl)ethyl] carbonothioate] (9CI)
MF   C19 H20 N4 O10 S

Absolute stereochemistry.
```
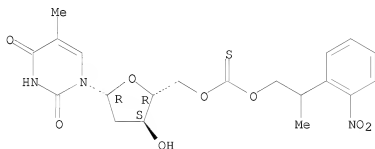


```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3   3 ANSWERS   REGISTRY   COPYRIGHT 2008 ACS on STN
IN   Thymidine, 5'-[O-[2-(2-nitrophenyl)propyl] carbonothioate] (9CI)
MF   C20 H23 N3 O8 S

Absolute stereochemistry.
```
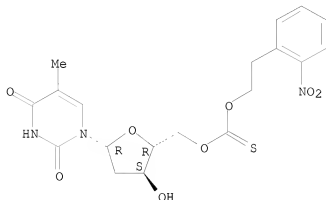


```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
```

```
L3    3 ANSWERS    REGISTRY  COPYRIGHT 2008 ACS on STN
IN    Thymidine, 5'-[O-[2-(2-nitrophenyl)ethyl] carbonothioate] (9CI)
MF    C19 H21 N3 O8 S
```
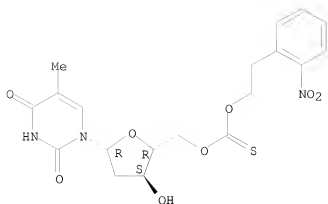
Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED


```
=> d l3 1-
YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L3    ANSWER 1 OF 3  REGISTRY  COPYRIGHT 2008 ACS on STN
RN    325975-03-9  REGISTRY
ED    Entered STN:  07 Mar 2001
CN    Thymidine, 5'-[O-[2-(2-nitrophenyl)ethyl] carbonothioate] (9CI)  (CA INDEX
      NAME)
FS    STEREOSEARCH
MF    C19 H21 N3 O8 S
SR    CA
LC    STN Files:  CA, CAPLUS
```
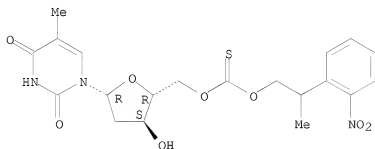
Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3   ANSWER 2 OF 3  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   325975-02-8  REGISTRY
ED   Entered STN:  07 Mar 2001
CN   Thymidine, 5'-[O-[2-(2-nitrophenyl)propyl] carbonothioate] (9CI)  (CA
     INDEX NAME)
FS   STEREOSEARCH
MF   C20 H23 N3 O8 S
SR   CA
LC   STN Files:   CA, CAPLUS
```

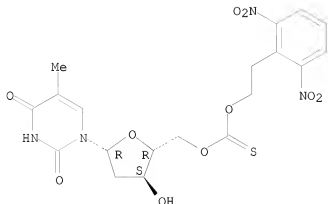Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3   ANSWER 3 OF 3  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   325975-00-6  REGISTRY
ED   Entered STN:  07 Mar 2001
CN   Thymidine, 5'-[O-[2-(2,6-dinitrophenyl)ethyl] carbonothioate] (9CI)  (CA
     INDEX NAME)
```

```
FS    STEREOSEARCH
MF    C19 H20 N4 O10 S
SR    CA
LC    STN Files:   CA, CAPLUS
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
              1 REFERENCES IN FILE CA (1907 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
```

```
=> b caplus
COST IN U.S. DOLLARS                          SINCE FILE    TOTAL
                                                ENTRY      SESSION
FULL ESTIMATED COST                             185.28     185.49

FILE 'CAPLUS' ENTERED AT 15:30:33 ON 29 APR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
```

```
FILE COVERS 1907 - 29 Apr 2008  VOL 148 ISS 18
FILE LAST UPDATED: 28 Apr 2008  (20080428/ED)
```

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s l3
L4          1 L3

=> d l4 scan

L4    1 ANSWERS   CAPLUS  COPYRIGHT 2008 ACS on STN
IC    ICM  C07H019-06
      ICS  C07H019-10; C07H019-16
CC    33-10 (Carbohydrates)
      Section cross-reference(s): 25
TI    Preparation of nucleoside derivatives capable of undergoing UV-photolysis
      for oligonucleotide synthesis
ST    photolabile thiocarbonate protective group nucleoside prepn
IT    Photochemistry
      Photolysis
      Protective groups
          (preparation of nucleoside derivs. capable of undergoing UV-photolysis for
          oligonucleotide synthesis)
IT    Nucleosides, preparation
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
          (preparation of nucleoside derivs. capable of undergoing UV-photolysis for
          oligonucleotide synthesis)
IT    Carbonates, preparation
      Group VIA element compounds
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
          (thiocarbonates; preparation of nucleoside derivs. capable of undergoing
          UV-photolysis for oligonucleotide synthesis)
IT    50-89-5, 2'-Deoxythymidine, reactions   463-71-8, Thiophosgene   606-20-2
      612-22-6   30525-89-4, Paraformaldehyde 325975-03-9
      RL: RCT (Reactant); RACT (Reactant or reagent)
          (preparation of nucleoside derivs. capable of undergoing UV-photolysis for
          oligonucleotide synthesis)
IT    64987-77-5P   77759-08-1P   325974-99-0P   325975-01-7P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
          (preparation of nucleoside derivs. capable of undergoing UV-photolysis for
          oligonucleotide synthesis)
IT    325975-00-6P 325975-02-8P
      RL: SPN (Synthetic preparation); PREP (Preparation)
          (preparation of nucleoside derivs. capable of undergoing UV-photolysis for
          oligonucleotide synthesis)

ALL ANSWERS HAVE BEEN SCANNED


=> d his

    (FILE 'HOME' ENTERED AT 15:28:31 ON 29 APR 2008)

    FILE 'REGISTRY' ENTERED AT 15:28:46 ON 29 APR 2008
L1           STRUCTURE UPLOADED
L2           0 S L1 SSS SAM
L3           3 S L1 SSS FULL

    FILE 'CAPLUS' ENTERED AT 15:30:33 ON 29 APR 2008
```
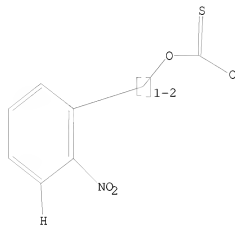
```
L4              1 S L3

=> d l1
L1 HAS NO ANSWERS
L1              STR
```

```
G1 NO2,X,H

G2 G1,CN,MeO,Ak

G3 O,S




Structure attributes must be viewed using STN Express query preparation.


=> s l4 and py<=2002
      22929871 PY<=2002
L5            1 L4 AND PY<=2002

=> d l5

L5   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2001:137226  CAPLUS <<LOGINID::20080429>>
DN   134:178767
TI   Preparation of nucleoside derivatives capable of undergoing UV-photolysis
     for oligonucleotide synthesis
IN   Berlin, Kurt
PA   Epigenomics A.-G., Germany
SO   PCT Int. Appl., 16 pp.
     CODEN: PIXXD2
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE      APPLICATION NO.       DATE
     ---------------     ----   --------  --------------------  --------
PI   WO 2001012642       A2     20010222  WO 2000-DE2755        20000810 <--
     WO 2001012642       A3     20010607
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
```

```
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
              YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      DE 19938092          A1    20010222    DE 1999-19938092        19990812 <--
      EP 1325016           A2    20030709    EP 2000-962214          20000810
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL
PRAI DE 1999-19938092      A     19990812
     WO 2000-DE2755        W     20000810
OS   MARPAT 134:178767


=> d his

     (FILE 'HOME' ENTERED AT 15:28:31 ON 29 APR 2008)

     FILE 'REGISTRY' ENTERED AT 15:28:46 ON 29 APR 2008
L1              STRUCTURE UPLOADED
L2          0 S L1 SSS SAM
L3          3 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 15:30:33 ON 29 APR 2008
L4          1 S L3
L5          1 S L4 AND PY<=2002

=> d l1
L1 HAS NO ANSWERS
L1              STR
```
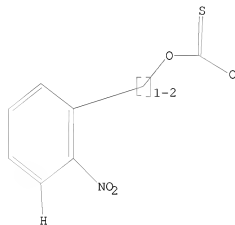


```
G1 NO2,X,H
G2 G1,CN,MeO,Ak
G3 O,S



Structure attributes must be viewed using STN Express query preparation.


=> logoff hold
```

```
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY      SESSION
FULL ESTIMATED COST                               4.77       190.26

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:32:21 ON 29 APR 2008
```